

***Sinarundinaria microphylla* (Munro) Chao & Renv. (Poaceae): a new record of a bamboo for Peninsular India**

K. Kishore Kumar and Muktesh Kumar

Kerala Forest Research Institute
Peechi - 680 653, Thrissur, Kerala, India

Abstract

Sinarundinaria microphylla (Munro) Chao & Renv., a small bamboo hitherto known confined to Eastern Himalayas is reported from Eravikulam National Park, Kerala. A brief description of the species along with illustration is provided here.

INTRODUCTION

The genus *Sinarundinaria* Nakai comprises about fifty species out of which two are found in Central America, three in Africa and Madagascar, and the rest in Asia (Moulik, 1997). Two sections, namely, *Chimonocalamus* (Hsueh & Yi) Chao & Renv. and *Sinarundinaria* are recognised under the genus (Chao Chi-son & Renvoize, 1989). *Chimonocalamus* is characterised by the presence of root thorns on culm nodes and is represented by two species in India. The section *Sinarundinaria* has no root thorns, and is represented by fourteen species in India.

During the recent botanical exploration in the Eravikulam National Park (75°5'8" E and 10°11'32" N) Idukki Dist., Kerala, the authors could collect an interesting specimen. A critical examination of the specimen revealed it to be *Sinarundinaria microphylla* (Munro) Chao & Renv. This species has been so far known to occur in Eastern Himlayan regions only (Karthikeyan *et al.*, 1989). It is now being reported for the first time from this part of India.

Sinarundinaria microphylla which was treated under the genus *Arundinaria* by Hooker (1897) and Gamble (1896) has a distributional record in Sikkim (Bahadur, 1979), Bhutan, Nepal and Khasia hills (Meghalaya) at elevations of 1800-3300 m (Moulik, 1997). No flowering specimen of this species has been collected so far (Tewari, 1992). Clarke's specimen (No.38990), with larger leaves collected from Soyung (Khasia hills) in 1885 at an elevation of 1680 m has a doubtful identity as opined by Gamble (1896). There is no mention of this species in *The Flora of the Presidency of Madras* as well (Fischer, 1928). Since the descriptions were purely based on Munro's specimen collected from Bhutan 130 years ago, the occurrence of this species in India was so far been considered doubtful (Moulik, 1997). But the present report of this species from the Eravikulam National Park confirms its occurrence in India with extended distribution to the southern Western Ghats.

K. Kishore Kumar and Muktesh Kumar

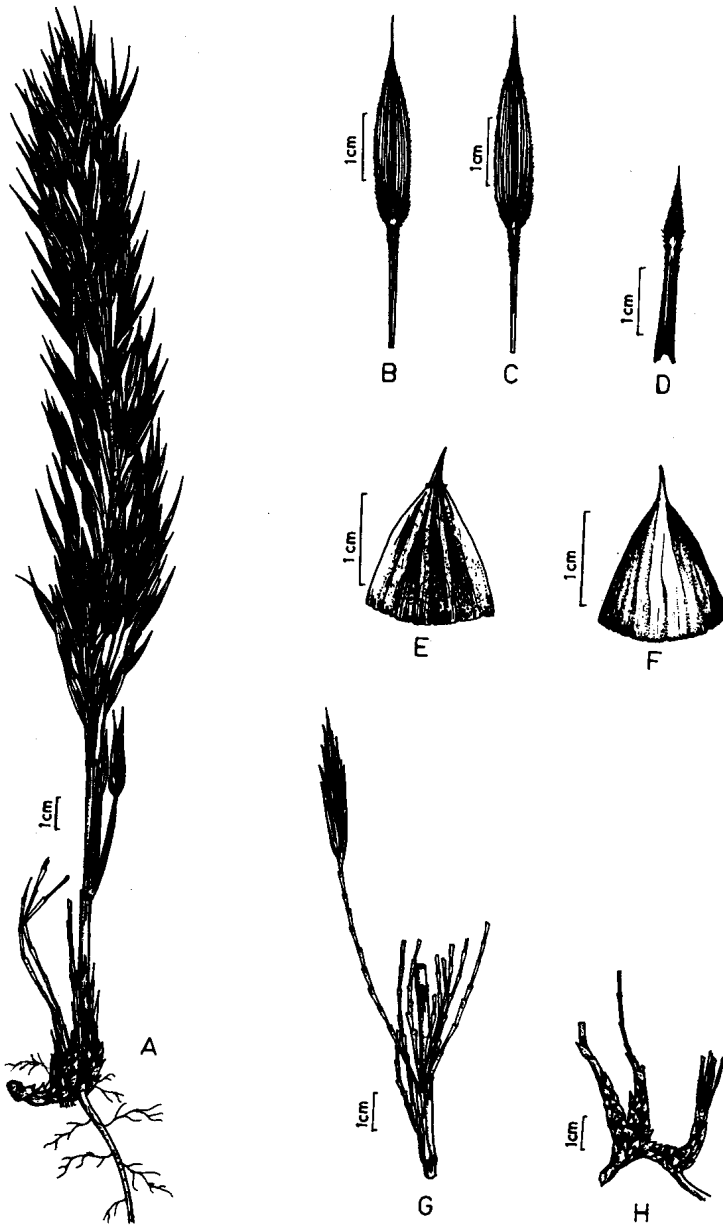


Fig. 1. *Sinarudinaria microphylla* (Munro) Chao & Renv. A. Habit; B & C. Leaf - ventral and dorsal views; D. Leaf sheath; E & F. Culm sheath - ventral and dorsal views; G. A portion of stem showing the branching; H. Root-stock showing sympodial branching.

***Sinarundinaria microphylla*: a new record**

Sinarundinaria microphylla (Munro) Chao & Renv. Kew Bull. 44: 354. 1989; Moulik, Grasses and Bamboos of India 1: 17. 1997 (Fig. 1).

Arundinaria microphylla Munro, Trans. Linn. Soc. 26: 32. 1866 (holotype - K).

Yushania microphylla (Munro) Majumdar in Karth. *et al.*, Fl. Ind. Enum. Monocot. 247-283. 1989.

Gregarious low shrubs, forming large patches in wet places. Stems 30-90 cm high, internodes 2-4 cm long, glabrous; branches semi-verticillate at the nodes. Leaves 1.5-3 x 0.3-0.5 cm, linear-lanceolate, acute, mucronate, tessellate with almost membranous fimbriate margins, nerves 1 pair, sheath often dark hairy above, bear auricles and oral setae at the apex, tip long fimbriate; ligule obscure.

Specimen examined: Eravikulam, alt. ca. 2060 m, Kishore Kumar 18041 (KFRI).

Distribution & Ecology: Rare. In montane wet temperate grasslands along the water-logged banks of perennial streams, in association with *Anaphalis travancorica*, *Anaphalis bournei*, *Ageratina adenophora*, *Pedicularis perrotteti*, *Bupleurum virgatum*, *Calamintha umbrosa*, *Oldenlandia buxifolia*, *Emelia scabra*, *Tripogon ananthaswamianus*, *Isachne kunthiana*, *Chrysopogon asper*, *Carex myosurus* and *Eriocaulon brownianum*.

Acknowledgements

The authors are grateful to Dr. K.S.S. Nair, Director, Kerala Forest Research Institute, Peechi, for the encouragements. The financial support and facilities provided by the Chief Conservator of Forests (WL), and the Wildlife Warden, Eravikulam National Park, of the Kerala Forest Department are thankfully acknowledged.

Literature cited

- Bahadur, K. N. 1979. Taxonomy of Bamboos. *Ind. J. Forestry*, 2(3): 222-241.
- Chao Chi-son & Renvoize, S. A. 1989. A revision of the species described under *Arundinaria* (Gramineae) in Southeast Asia and Africa. *Kew Bull.* 44(2): 349-367.
- Fischer, C. E. C. 1928. In: J. S. Gamble, *The Flora of the Presidency of Madras*, Vol. 3. London.
- Gamble, J. S. 1896. The Bambusae of British India. *Ann. Roy. Bot. Gard. Calcutta*, Vol. 7 (Repr. Edn., 1978). Bishen Singh Mahendrapal Singh, Dehra Dun, India.
- Hooker, J. D. 1897. *Flora of British India*, Vol. 7. L. Reeve & Co., London.

K. Kishore Kumar and Muktesh Kumar

- Karthikeyan, S., S. K. Jain, M. P. Nayar & M. Sanjappa. 1989. *Florae Indicae Enumeratio Monocotyledonae*. Botanical Survey of India, Calcutta, pp.247-283.
- Moulik, S. 1997. *The Grasses and Bamboos of India*, Vol. 1. Scientific Publishers, Jodhpur.
- Tewari, D.N. 1992. A monograph on Bamboo. International Book Distributors, Dehra Dun.